
JDW-C
Accessories

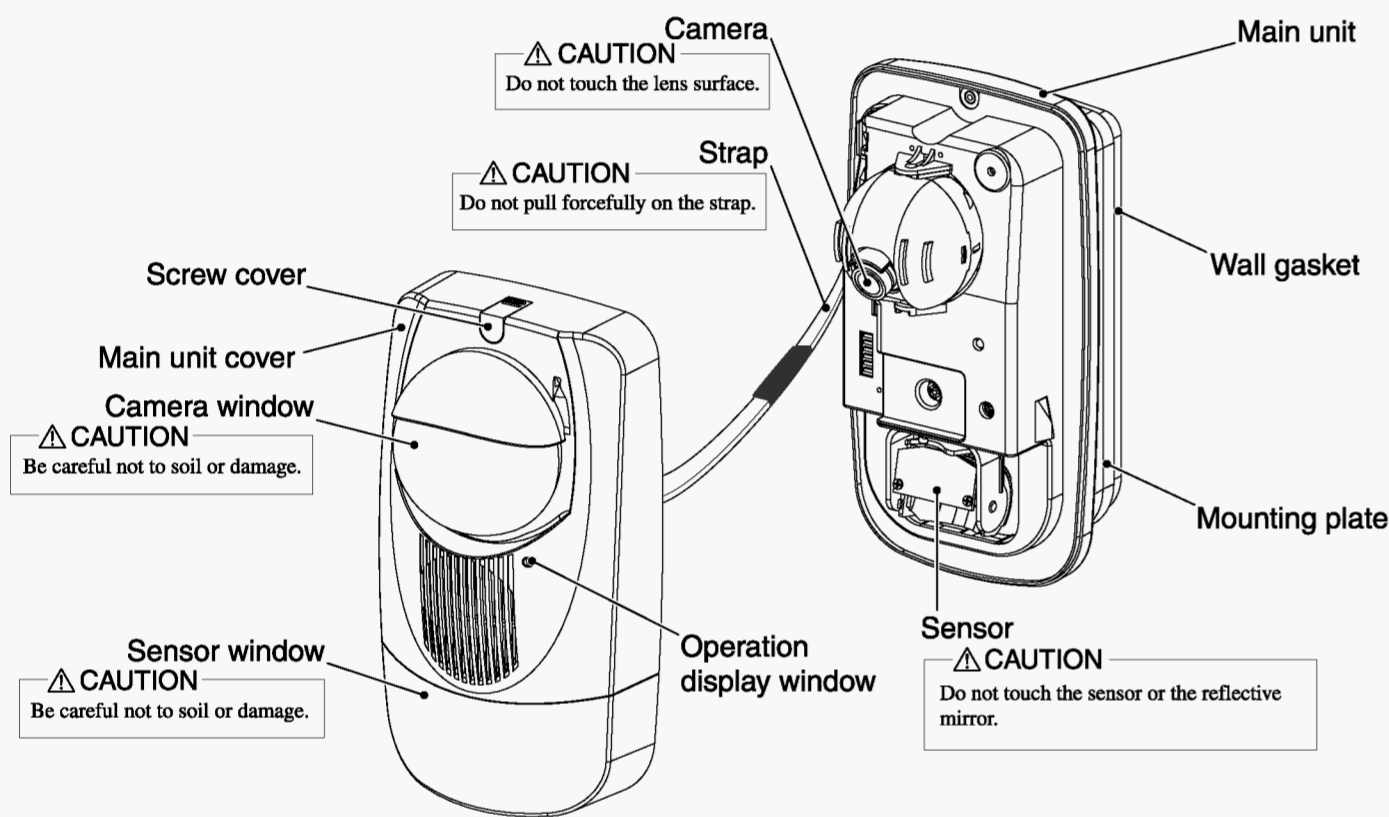
Installation manual (this document) x 1
 Sensor detection area adjustment sheet x 1
 Manual for adjusting sensor detection area x 1



Mounting screws x 2

When you open up the package, make sure all the accessories are present.

NAMES & FUNCTIONS



SPECIFICATIONS

Model No.	JDW-C
Power	Supplied from the master station
Operating temperature range	-10 ~ +50 °C
Storage temperature range	-20 ~ +60 °C
Operating humidity range	85% (max.)
Picture element	1/3-inch color CCD
Camera angle of view (horizontal x vertical)	71.5° x 53.4° (f=3.8)
Minimum illumination	1.0 lux
Sensor operation display light	Lights up green when the sensor detects something (Can be switched OFF with the select switch)
Sensor detection method	Heat ray type
Sensor detection area	Max. 5 meters, approx. 70°
Sensor detection speed	0.3 ~ 1.5 m/sec.
Sensor sensitivity switching	Switchable among three levels H (high), M (medium), and L (low)
Sensor startup time	Approx. 30 sec. after power comes on
External sensor input	An external sensor can be connected and operated in either an "AND" or "OR" configuration with this unit.
Internal sensor switching	The internal body detection sensor can be controlled to be "ON" or "OFF".
Internal speaker	The internal speaker can be controlled to be "ON" or "OFF" with the speaker select switch.
Internal mic.	The mic. sensitivity can be adjusted with the mic. sensitivity volume.
Master station switch	Switchable according to the master station version.
Angle adjustment range	Camera ±50° left/right, -20° to -55° up/down (The horizontal direction is 0°) (The left/right and up/down angles can both be changed in increments of 5°.)
	Sensor ±50° left/right, -20° to -55° up/down (The horizontal direction is 0°) (The left/right angle can be changed in increments of 10° and the up/down angle in increments of 5°.)
Installation places	Indoors/Outdoors
Protective structure	Weather-resistant
Weight	Approx. 400 g
Dimensions (mm)	102 (W) x 182 (H) x 94 (D)

SAFETY CAUTIONS

Precaution notation

This installation manual uses various symbols for the sake of safe usage. The results that can occur from ignoring these indications and handling this equipment incorrectly are categorized as follows.

Icon display example

symbol indicates a prohibition. The specific content prohibited is drawn in or near the figure. (For the figure on the left, disassembly is prohibited.)

symbol indicates behavior that is mandatory and gives directions.

WARNING	CAUTION
<p>This indicates that ignoring the contents of the warning and handling the equipment incorrectly can result in death or severe injury.</p>	<p>This indicates that ignoring the contents of the warning and handling the equipment incorrectly can result in personal injury and/or damage to equipment.</p>
<p>Do not disassemble or alter.</p> <p>Do not disassemble or alter this equipment. Doing so would be dangerous. Fire or electric shock could result.</p>	<p>Use in areas with water or high humidity is prohibited.</p> <p>This product is weather resistant, but do not install it in a bathroom or other place with extremely high humidity, any place where water might get into it, or in water. Do not spray water directly on this equipment, for example with a hose. Fire, electric shock, and equipment damage could result.</p>
<p>Electric shock caution</p> <p>Do not touch the main unit with damp or wet hands. Electric shock and equipment damage could result. When existing chime wiring is used, it is possible that it contains AC power. This can cause equipment damage and electric shock. Have the installation done by an electrical contractor, low voltage contractor, or qualified personnel.</p>	<p>Install securely.</p> <p>Install securely to a solid location so that the equipment can not drop from its own weight. Equipment falling could result in injury.</p>

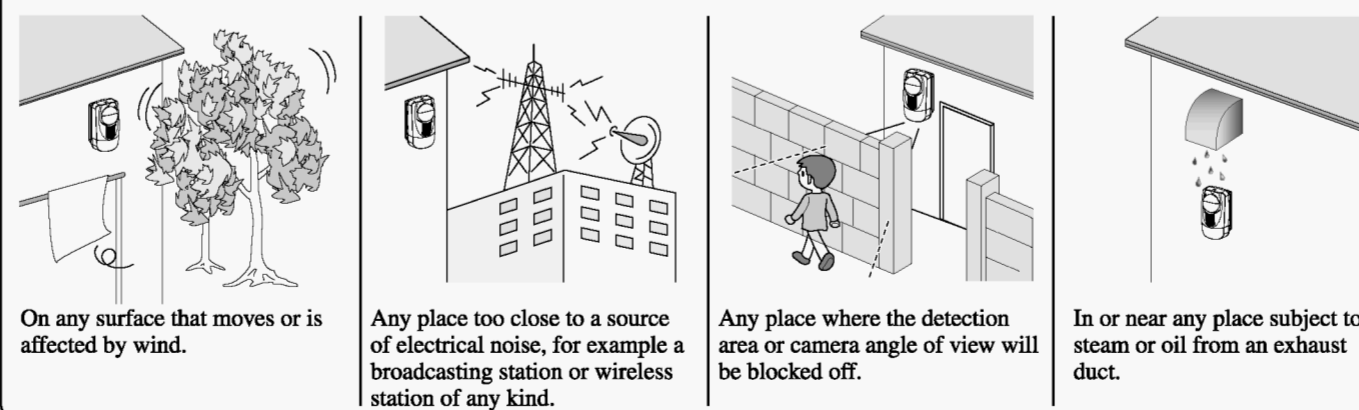
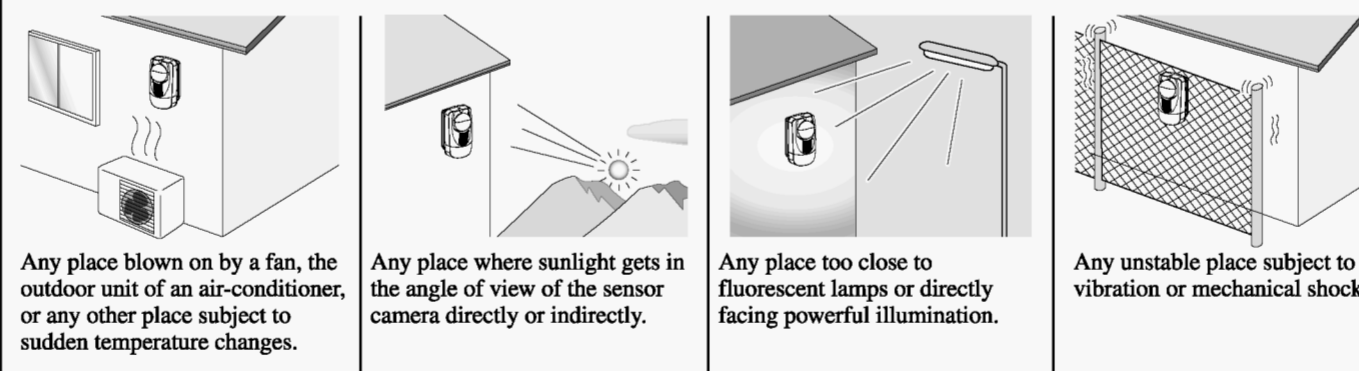
Notice

This product detects a person, provides notice, and shoots images. It is not an anti-theft device. Aiphone does not bear responsibility for any damage incurred in the event of theft or other such incident.

CAUTION

Installation precautions

For correct installation
 Do not install in the following places.



Connection precautions

- Use two conductor wire from the JDW-C to the master station. Do not use coaxial cable.
- When using two cameras, always use one two conductor wire for each camera. If you connect two cameras with one multi-conductor wire, the cameras may not operate correctly.
- If the wiring is routed together with high voltage AC wiring, other power wiring, wiring for electrical lights, and telephone lines, this can disrupt the picture and sound quality and cause malfunction. Either use separate conduits or run wires in separate paths from each other.
- When existing wiring is used, for some type of wiring, this system may not operate correctly. Changing the wiring restores normal operation.

TROUBLESHOOTING

① The unit does not operate.	• No power is being supplied from the master station.	• Wire the master station correctly to supply power.
	• The wiring is incorrect or a line is open or shorted.	• Wire correctly. (See "MOUNTING AND CONNECTION".)
	• The unit was wired to the master station with power supplied.	• Keep the power OFF until the wiring is completed.
② The system does not detect people.	• The master station select switch setting is reversed.	• Set "A" and "B" correctly. (See "SETTINGS".)
	• The detection area is not correctly set.	• Check the detection area and camera angle of view area and install so that people are detected. (See "ADJUSTMENTS".)
	• People are passing nearly directly under the sensor camera.	• Adjust the up/down angle to point down so that they are detected.
	• People are coming directly at the camera.	• This is not a breakdown. Because of the characteristics of a heat ray type sensor, it may have difficulty detecting people coming directly at the camera. As much as possible, install in such a way that people cut across the detection area. (See "ADJUSTMENTS".) • Connect an external sensor in "OR mode" so that people cut across the detection area. (See "SETTINGS".)
③ Sound cannot be heard from the unit.	• The detection area is cut off by glass.	• This is not a breakdown. A heat ray type sensor cannot detect objects through glass. Install in a place where the detection area is not cut off by the glass. (See "MOUNTING AND CONNECTION".)
	• With the external sensor input function in "AND mode", people are only detected by the main sensor or by the external sensor but not by both.	• This is not a breakdown. Set the detection area for each sensor so that people are detected by both sensors. (See "SETTINGS".)
	• The internal sensor switch is "OFF".	• Switch "ON" the internal sensor switch.
④ Sound cannot be heard from the master station.	• The speaker select switch is "OFF".	• Switch "ON" the speaker select switch.
	• The master station select switch is "B".	• Switch the master station select switch to "A". (Sound cannot be heard from the unit when the master station is JA-2MECD or JA-2MCD.)
⑤ There is howling.	• The wiring is incorrect or a line is open or shorted.	• Wire correctly. (See "MOUNTING AND CONNECTION".)
	• The mic. sensitivity volume is at the "Low" side.	• Turn the mic. sensitivity volume to the "High" side. (See "SETTINGS".)
⑥ The sensor is detecting but the detected objects are not displayed on the screen.	• The sensor camera is installed too close to the master station.	• This is not a breakdown. Install the sensor camera farther from the master station or turn the mic. sensitivity volume to the "Low" side until there is no howling.
	• There is a dog or cat or other small animal in the detection area.	• Set the sensor sensitivity switch to "L (Low)". (See "SETTINGS".) • Recommend to connect an external sensor and use it in "AND mode". (See "SETTINGS".)
	• There is something that moves in the detection area, for example a flag or tree blowing in the wind, or there are sudden temperature changes.	• Set the sensor sensitivity switch to "L (Low)". (See "SETTINGS".) • Either move the moving object or the object causing the sudden temperature changes outside the detection area or change the area setting. (See "SETTINGS".)
⑦ The picture is dark, blurred, or not displayed at all.	• The external sensor area does not match the camera angle of view.	• Align the external sensor area and the camera angle of view. (See "ADJUSTMENTS" and "SETTINGS".)
	• The wiring is incorrect or a line is open or shorted.	• Check the wiring and wire correctly. (See "MOUNTING AND CONNECTION".)
⑧ There are white lines on the screen.	• The camera window is dirty.	• Clean the lens with lens cleaner or with a clean, soft, damp cloth.
	• The outside temperature dropped suddenly and the camera window has fogged up.	• When the temperatures inside and outside the product even out, the camera window returns to normal.
⑨ The screen is flickering.	• There is a bright light source in the camera angle of view.	• Either remove the light source, adjust the angle so that the light does not come into the angle of view, or change the mounting location of the main unit. (See "ADJUSTMENTS".)
	• There is a fluorescent lamp nearby.	• This is not a breakdown. Block out the light from the fluorescent lamp.

WARRANTY

Aiphone warrants its products to be free from defects of material and workmanship under normal use and service for a period of two years after delivery to the ultimate user and will repair free of charge or replace at no charge, should it become defective upon which examination shall disclose to be defective and under warranty. Aiphone reserves unto itself the sole right to make the final decision whether there is a defect in materials and/or workmanship; and whether or not the product is within the warranty. This warranty shall not apply to any Aiphone product which has been subject to misuse, neglect, accident, or to use in violation of instructions furnished, nor extended to units which have been repaired or altered outside of the factory. This warranty does not cover batteries or damage caused by batteries used in connection with the unit. This warranty covers bench repairs only, and any repairs must be made at the shop or place designated in writing by Aiphone. Aiphone will not be responsible for any costs incurred involving on site service calls.

MOUNTING AND CONNECTION

①

Remove the screw cover and loosen the cover mounting screw. Pull the top of the two sides of the main unit cover toward you and remove the main unit cover.

CAUTION
Do not pull the cover out more than is necessary. It may result disconnection at cable.

②

Loosen the lock screw, pull the main unit bottom toward you, and remove the main unit from the mounting plate.

③

When mounting on an outside wall with a large gap or on an uneven surface, such as tiles, fill in the mounting surface grooves and gaps with caulk.

CAUTION
If the waterproofing is incomplete, this can cause equipment breakdown, fire, or electric shock.

④

Mount with this claw facing up.

Tear the wall sponge at the mounting plate wiring hole section and pull the wires through from inside the wall. Mount the mounting plate at the prescribed position. *Caulk around the wires before mounting the main unit.

⑤

Fill in the gaps.

Connect the necessary wires. *See the "Wiring diagram". After that, fill in the gap at the wiring hole section.

⑥

Mount the unit onto the frame, then tighten down the lock screws. Next, adjust the camera and sensor. For details, refer to "ADJUSTMENTS".

◆ Wiring

CAUTION
Always cut off the power switch before wiring. Do not install with wet or damp hands. Electric shock could result.

CAUTION
Before turning on the power, make sure wires are not wrongly connected or shorted. Fire or electric shock could result.

Wiring diagram showing connections for Non-polarized, External sensor input, Master station, and C1, C2.

Wipe the master station with PE (polyethylene) insulated wire with PVC jacket. Refer to the table below for wire diameters and permitted wiring distances.

Single core wire	Ø 0.65 mm	Ø 0.9 mm	Ø 1.2 mm
Distance	50 meters max.	100 meters max.	100 meters max.

Peel approx. 7 mm of insulation off the ends of wires.

◆ When surface cable runs are necessary

Mounting plate

Cut out the knockout at the bottom of the mounting plate and wire the required wires to the main unit side.

SETTINGS

● Speaker switching

Make sure the speaker select switch is always on "OFF" side.

● Operation indicator light (LED) switching

The operation indicator light select switch can switch the operation indicator lights ON/OFF. The normal setting is "OFF". Switching OFF the operation indicator light avoids making visitors aware that they are being photographed by the camera.

The factory setting is "OFF"

ON: The LED lights up when a person is detected. It lights up for approx. 2 sec. (Used for area adjustment.)
OFF: The LED does not light up. (This is the normal position for use.)

● Sensor sensitivity switching

The sensor sensitivity select switch can switch the sensitivity with which people are detected among three levels. Set this switch to match the environment.

The factory setting is "M"

H (High): This raises the sensitivity. (Set this if detection is difficult.)
M (Medium): Normally, use this position.
L (Low): This lowers the sensitivity. (Set this if the system is frequently triggered by mistake.)

* This does not change the sensitivity of a sensor connected directly to the external sensor input.

The sensor sensitivity varies with the temperature and this can cause mistaken detection. Set the sensitivity according to the season as follows.
Summer -> H (High) Spring, Autumn (Medium) Winter -> L (Low)

● Internal sensor switching

The internal sensor can be switched ON/OFF by the main unit's internal sensor select switch. Use this when the internal sensor is not necessary, for example when using an external sensor.

The factory setting is "ON".
ON: The internal sensor detects people.
OFF: The internal sensor does not detect people.

● Master station switching

You can switch the master station version.

The factory setting is "B".
B: JA series

● External sensor input function

The external sensor input function connects a separate sensor to this unit's external sensor input to widen the detection range and improve the reliability of detection performance. For the external sensor unit, connect one with N.C. type (normally closed) output.

The factory setting is ① set.

① OR mode
When a person enters the detection area of this unit or external sensor, the sensor detects this and their picture is taken. Since this mode is triggered by entry to either one of the detection areas, it can widen the detection area. When not connecting an external sensor, set to this position.

② AND mode
If someone is detected by either this unit or the external sensor, then is detected by the other sensor within 30 sec., that person is detected and photographed. (If someone passes through only one detection area, even if he/she then passes through the other detection area more than 30 sec. later, he/she is not detected.) Since the detectors do not detect if a person, a cat, or whatever passes through only one of the detection areas, this is an effective measure against mistaken detection.

* When connecting an external sensor, install it somewhere that the camera on this unit can photograph anyone who enters that external sensor's detection area.
* When not connecting an external sensor, use "OR mode".

② and ④: The person is detected and photographed.
only ②, or only ④: Does not detect.

ADJUSTMENTS

① Adjusting the camera direction:
The camera moves 50° to the left and to the right. (It moves in 5° by a step.)
The camera moves 35° down. (It moves in 5° by a step.)

② Adjusting the sensor direction:
The sensor moves 50° to the left and to the right. (It moves in 10° by a step.)
The sensor moves 35° down. (It moves in 5° by a step.)

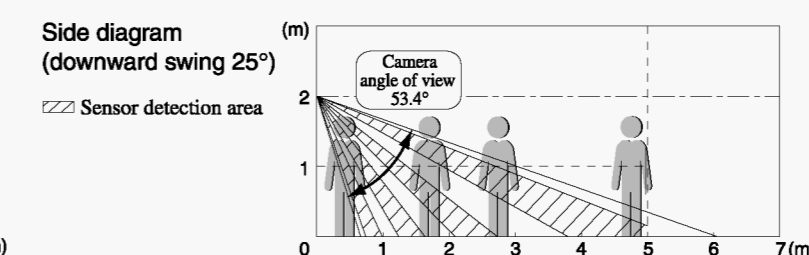
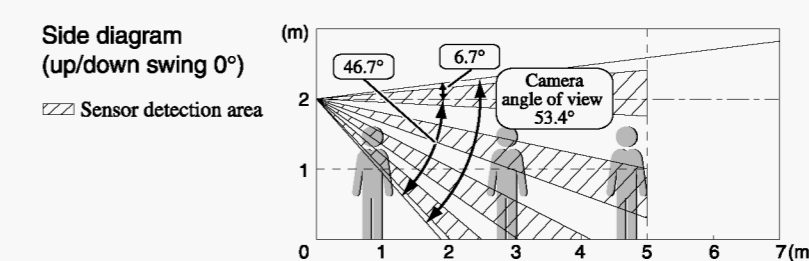
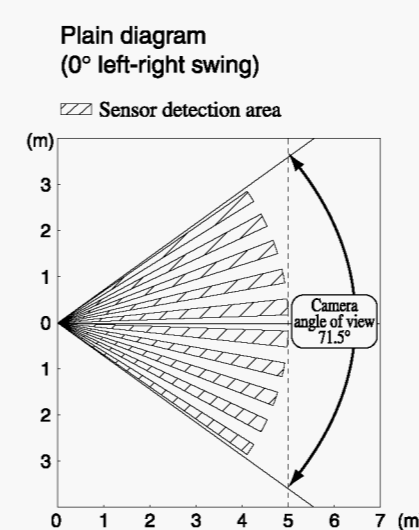
Caution:
Adjust the sensor direction with holding the plastic knob on the top of the sensor, NOT with touching the reflector plate or P.C. board of the sensor. Touching the sensor with wet or damp hands, could cause malfunction or breakdown.

③ When the camera and sensor adjustments are complete, put the main unit cover on securely from the front and tighten down the main unit cover mounting screws.

◆ Detection area and camera angle of view

Angle adjustment range	Camera	50° (5° increments)	35° (5° increments)
	Sensor	50° (10° increments)	35° (5° increments)

Camera angle of view	Horizontal angle of view	71.5°
	Vertical angle of view	53.4°



◆ Installation precautions

Figure A

Sometimes a person approaching the detection area from directly in front of the camera is difficult to detect. (Figure A)

Figure B

Mount so that persons cut across the detection area. (Figure B)